

(12) **United States Patent**  
**Zbinden et al.**

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(54) **TRANSCIVER AND INTERFACE FOR IC PACKAGE**

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(58) **Field of Classification Search**

USPC ..... 398/115, 116  
See application file for complete search history.

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(57) **ABSTRACT**

An interconnect system includes a first circuit board, first and second connectors connected to the first circuit board, and a transceiver including an optical engine and arranged to receive and transmit electrical and optical signals through a cable, to convert optical signals received from the cable into electrical signals, and to convert electrical signals received from the first connector into optical signals to be transmitted through the cable. The transceiver is arranged to mate with the first and second connectors so that at least some converted electrical signals are transmitted to the first connector and so that at least some electrical signals received from the cable are transmitted to the second connector.

**12 Claims, 59 Drawing Sheets**

